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A New Species of the Genus *Chordodes* (Gordiaceae)  
from Ethiopia

With 1 Text-figure

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**ABSTRACT** *Chordodes aethiopicus* n. sp. is described on the basis of two female specimens collected in the Awash National Park, Ethiopia. This new species is distinguished from the other species of *Chordodes* by its peculiar characters of the cuticle.

On the Gordiaceae from Ethiopia, only two species, *Gordionus kaschgaricus* (Camerano) and *Beatogordius erythraeus* (Camerano), have been reported by Camerano.

Lately, through the courtesy of Prof. Hiroshi Itagaki, Department of Parasitology, Azabu Veterinary College, the author had an opportunity of examining two female specimens of Gordiaceae found in Ethiopia. After a careful study, it becomes evident that these horsehair worms represent a new species belonging to the genus *Chordodes*. Thus, we have now three species of Gordiaceae in Ethiopia.

*Chordodes aethiopicus* n. sp.

Two females, variable in size, measuring 73 and 85 mm long by 0.7 and 0.8 mm broad at the thickest portion. Body colour light yellowish brown.

The diagnostic characters of this new species are as given below:

- 1) Anterior end white in colour; without neck ring.
- 2) No ventral and dorsal lines.
- 3) Cuticle: Three types of papillae are recognized.

First type of papillae (a in Fig. 1): Highest of all (11–15  $\mu$  in height), conical with rounded top in side view, and round in surface view, being fringed with a series of short hairs at the top. These papillae are sparsely scattered in pairs, and have a (rarely two) transparent process (d in Fig. 1) between them.

Second type of papillae (b in Fig. 1): Conical with rounded top in side view, being lower and smaller than Type 1 (8–12  $\mu$  in height), mostly provided with some

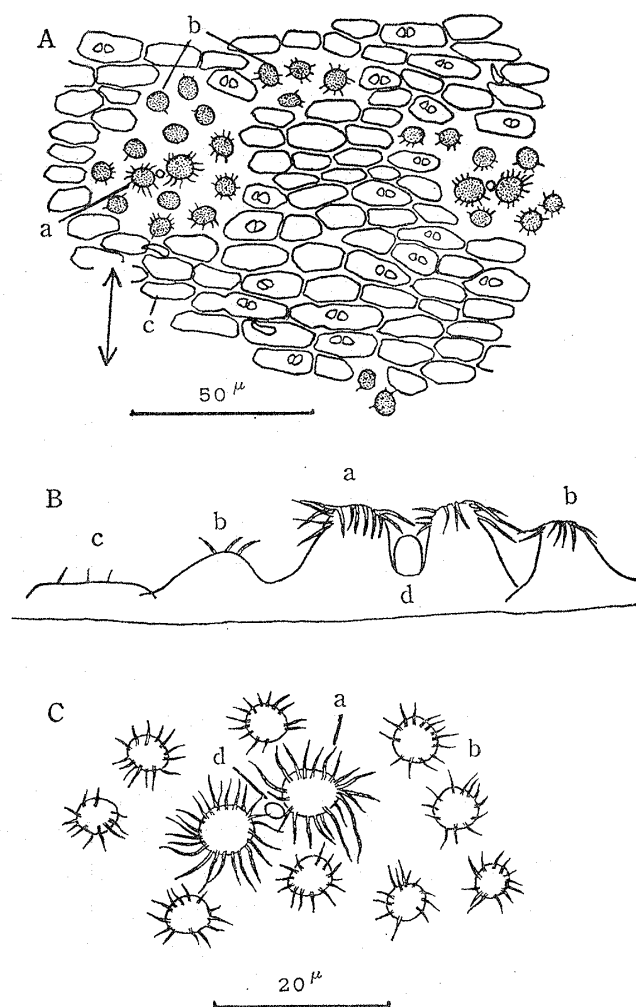


Fig. 1. *Chordodes aethiopicus* n. sp., holotype.—Cuticular papillae: A and C, surface views; B, lateral view. The arrow shows the direction of the longitudinal axis of body. a, b, c, 1st, 2nd and 3rd types, respectively; d, transparent process.

fine hairs which are shorter than those in Type 1. These papillae usually form groups, each 8–18 in number, and are arranged around respective pairs of Type 1, though sometimes forming groups of their own by a smaller number of papillae (2–6, mostly 3–4).

Third type of papillae (c in Fig. 1): The lowest (3–5 μ in height) and most numerous of all, each being provided with a few delicate hairs; irregularly polygonal in surface view, and elongated in the direction perpendicular to the longitudinal axis of body (longer diameter: 10–20 μ). These papillae are set close together, filling out the spaces among the papillae of the above-mentioned types.

Adding to these, curved, finger-shaped processes occur sparsely in the inter-papillar furrows and, rarely, on some of the third-type papillae.

**Discussion.** This new species bears some resemblance to the following species: *Chordodes timorensis* Camerano, *Chordodes aquaeductus* Kirjanova, *Chordodes puncticulatus* Camerano and *Chordodes bipilus* Kirjanova. It is, however, distinguished from the first two species by the following characteristics: 1) the presence of transparent process between each pair of the highest papillae, 2) the lowest papillae rather flat and polygonal in surface view, 3) the presence of finger-shaped process in the interpapillar furrows, 4) the presence of three types of papillae, etc.; from *Ch. puncticulatus* by 1) the absence of both dorsal and ventral lines, 2) the absence of spines in the interpapillar furrows, 3) the differentiation of two types of papillae in each high papillae-group, etc.; from *Ch. bipilus* by 1) the absence of spines, 2) the presence of transparent process between each pair of the highest papillae, 3) the presence of three types of papillae, 4) the presence of finger-shaped processes in the interpapillar furrows, etc.

**Host.** A mantis (species name unknown).

**Type-series.** Holotype: ♀, The Awash National Park, Ethiopia; Feb. 7, 1968, collected by an official of the National Park; preserved in Tokyo Gakugei University. Paratype: 1 ♀, same data as the holotype.

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